purchase price up to a price of X units with a probability of $((N + p) / X)$ and down to a price of zero units with a probability of $1 - ((N + p) / X)$, wherein probability p equals $C/100$, as required by independent claim 15, as amended.

Dependent Claims 2-11, 13-14, 16-17 and 19-22

Dependent claims 2-11, 16-17, and 19-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Adams, claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over Adams in view of Walter C. Jones, and claims 13-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Adams in view of Raymond J. Barber.

Claims 2-11, 13-14, 16-17 and 19-22 are dependent on claims 1, 12, 15, and 18, respectively, and are therefore patentably distinguished over Adams, Jones, and Barber, Jr., alone or in any combination, because of their dependency from amended independent claims 1, 12, 15, and 18 for the reasons set forth above, as well as other elements these claims add in combination to their base claim.

Requirement for Information under 37 CFR 1.105

The Examiner has requested that information be provided describing where a cited formula is derived from and, further, how you round off $(N+p) = 3.5$ and $X=5$, and $(N+p) = 2.5$ and $X=5$.

The advertised Purchase Price is N.C., $p = C/100$. In a probabilistic game of this sort, one considers the game to be "fair" if the expected purchase price is equal to the actual purchase price if one chooses not to play the game.

For a discrete random variable Z taking the value Z_1 with probability q and Z_2 with probability 1-q, and denoting the expected value of Z by E(Z) we have

$$E(Z) = p \, Z_1 + (1-p) \, Z_2.$$

This fundamental equation is discussed in introductory books on probability or statistics (see, for example, "An Introduction to Probability Theory and Its Applications," Volume 1, by William Feller, Princeton University, John Wiley & Sons, Inc., NY, 1968: p. 221 or "Probability and Statistics," 2nd Edition, by Morris H. DeGroot, Carnegie-Mellon University, Addison-Wesley Publishing Co., MA, 1989: p. 179).

In the case referred to by the Examiner, we have

Expected Price = ((N + p)/X) X + (1 - ((N + p)/X)) 0 = N + p

where N + p is the advertised price so the game is fair.

If N + p = 3.5 and X = 5, we have

Expected Price = ((N + p)/X) X + (1 - ((N + p)/X)) 0 = N + p = 3.5.

Similarly, for N + p = 2.5 and X = 5, we have

Expected Price = (2.5/5) 5 = 2.5.

Conclusion

All of the pending claims, i.e., claims 1-23, are in condition for allowance and such favorable action is earnestly solicited.

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number indicated below.

The Examiner's attention to this matter is appreciated.

Respectfully submitted,

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